

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Gerald S. PULLMAN et al.

Application No.: 10/076,633

Filed: February 19, 2002

For: Methods for Increasing Conifer  
Somatic Embryo Initiation,  
Capture and Multiplication

) Group Art Unit: 1638

Examiner: Not Yet Assigned

Assistant Commissioner for Patents  
Washington, DC 20231

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Sir:

**INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97(b)**

Pursuant to 37 C.F.R. §§ 1.56 and 1.97(b), applicants bring to the attention of the Examiner the documents listed on the attached PTO 1449. This Information Disclosure Statement is being filed before the mailing date of a first Office Action on the merits for the above-referenced application.

Copies of the listed documents are attached. As all the documents are in the English language, no additional statement of relevance is required.

Applicants respectfully request that the Examiner consider the listed documents and indicate that they were considered by making appropriate notations on the attached form.

This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that each or all of the listed

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documents are material or constitute "prior art." If the Examiner applies any of the documents as prior art against any claim in the application and applicants determine that the cited documents do not constitute "prior art" under United States law, applicants reserve the right to present to the office the relevant facts and law regarding the appropriate status of such documents.


Applicants further reserve the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application.

If there is any fee due in connection with the filing of this Statement, please charge the fee to our Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,  
GARRETT & DUNNER, L.L.P.

Dated: July 1, 2002

By:   
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## INFORMATION DISCLOSURE CITATION

OMB No. 0651-0011

Atty. Docket No. 07618-0025-00000	Appln. No. 10/076,633	<b>RECEIVED</b> JUL 3 2002 TECH CENTER 1600/2900
Applicant PULLMAN et al.	Filing Date February 19, 2002	
Group: 1638		

## U.S. PATENT DOCUMENTS

Examiner Initial*	Document Number	Issue Date	Name	Class	Sub Class	Filing Date If Appropriate
	4,957,866	09/18/90	Gupta et al.			
	5,236,841	08/17/93	Gupta et al.			
	5,294,549	03/15/94	Pullman et al.			
	5,563,061	10/08/96	Gupta			
	5,814,581	09/29/98	Hirakawa et al.			

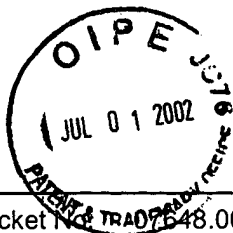
## FOREIGN PATENT DOCUMENTS

Document Number	Publication Date	Country	Class	Sub Class	Translation Yes or No

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

Becwar et al., "Initiation of embryogenic cultures and somatic embryo development in loblolly pine ( <i>Pinus taeda</i> ), <i>Canadian Journal of Forest Research</i> , Vol. 20, No. 6, pgs. 810-817, June 1990
Becwar et al., "Development and Characterization of <i>In Vitro</i> Embryogenic Systems In Conifers," <i>Somatic Cell Genetics of Woody Plants</i> , pgs. 1-18, August 10-13, 1988
Brosa, "Biological Effects of Brassinosteroids," <i>Critical Reviews in Biochemistry and Molecular Biology</i> , Vol. 34, No. 5, pgs. 339-358, 1999
Finer et al., "Initiation of embryogenic callus and suspension cultures of eastern white pine ( <i>Pinus strobus</i> L.)," <i>Plant Cell Reports</i> , Vol. 8, pgs. 203-206, 1989
Gupta et al., "Liquid Media and Automation Strategy for Large-scale Production of Conifer Somatic Embryos for Reforestation," <i>In Vitro Cellular &amp; Developmental Biology</i> , Vol. 35, No. 3, Part II, March 1999, pg. 22-A
Kumar et al., "Ethylene and Carbon Dioxide Accumulation, and Growth of Cell Suspension Cultures of <i>Picea glauca</i> (White Spruce)," <i>J. Plant. Physiol.</i> , Vol. 135, No. 5, pgs. 592-596, January 1989

Examiner	Date Considered
*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	
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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)	
	Kvaalen et al., "Effects of various partial pressures of oxygen and carbon dioxide on different stages for somatic embryogenesis in <i>Picea abies</i> ," <i>Plant Cell Tissue and Organ Culture</i> , Vol. 27, pgs. 49-57, October 1991
	Kvaalen et al., "Oxygen influences benzyladenine and 2,4-dichlorophenoxyacetic acid levels in cultured embryogenic tissue of Norway spruce," <i>Physiologia Plantarum</i> , Vol. 88, pgs. 571-576, August 1993
	Li et al., "Induction of Somatic Embryogenesis in Loblolly Pine ( <i>Pinus Taeda</i> L.)," <i>In Vitro Cellular &amp; Developmental Biology</i> , Vol. 32, No. 3, pgs. 129-135, July-September 1996
	Majada et al., "In Vitro Culture In Liquid Media: A Requirement For Automatization," <i>Acta Horticulturae</i> , Vol. 289, pg. 239, 1991
	El Meskaoui et al., "Effects of sealed and vented gaseous microenvironments on the maturation of somatic embryos of black spruce with a special emphasis on ethylene," <i>Plant Cell, Tissue and Organ Culture</i> , Vol. 56, pgs. 201-209, 1999
	Michler et al., "Effects of embryo explant type and developmental maturity on Eastern White pine ( <i>Pinus strobes</i> L.) embryogenic callus initiation," Abstracts of Papers Presented at the International Symposium on Applications of Biotechnology to Tree Culture, Protection and Utilization, August 5-8, 1991
	Phippen et al., "Genotype, plant, bud size and media factors affecting anther culture of cauliflowers ( <i>Brassica oleracea</i> var. <i>botrytis</i> )," <i>Theor Appl Genet</i> , Vol. 79, pgs. 33-38, 1990
	Rönsch et al., "Influence of (22S,23S)-homobrassinolide on rooting capacity and survival of adult Norway spruce cuttings," <i>Tree Physiology</i> , Vol. 12, pgs. 71-80, January 1993
	Roth et al., "Brassinosteroids: Potent Inhibitors of Growth of Transformed Tobacco Callus Cultures," <i>Plant Science</i> , Vol. 59, pgs. 63-70, 1989
	Salajova et al., "Initiation of embryogenic tissues and plantlet regeneration from somatic embryos of <i>Pinus nigra</i> Arn," <i>Plant Science</i> , Vol. 145, pgs. 33-40, 1999
	Selby et al., "The influence of culture vessel head-space volatiles on somatic embryo maturation in Sitka spruce [ <i>Picea sitchensis</i> (Bong.) Carr.]," <i>Plant Growth Regulation</i> , Vol. 20, pgs. 37-42, 1996
	Tautorus et al., "Somatic embryogenesis in conifers," <i>Canadian Journal of Botany</i> , Vol. 69, No. 3, pgs. 1873-1899, September 1991
	Van Winkle, "Combined Effects of Activated Carbon and pH on Ionic Composition and 2,4-D Availability In A Tissue Culture Medium," Abstract, <i>Biological Sciences Symposium</i> , pgs. 49-56, 1997
	Yang et al., "Effect of Brassinolide on Growth and Shikonin Formation in Cultured <i>Onosma paniculatum</i> Cells," <i>J. Plant Growth Regulation</i> , Vol. 18, No. 2, pgs. 89-92, 1999

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